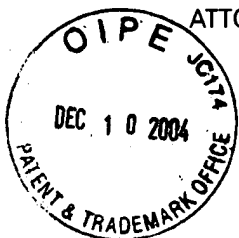


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December 10, 2004

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 1641

Re: U.S. Utility Patent Application
Application No. 10/743,295; Filed: December 23, 2003
For: **Polymer Conjugates of Cytokines, Chemokines, Growth Factors,
Polypeptide Hormones and Antagonists Thereof with Preserved
Receptor-Binding Activity**
Inventors: BHASKARAN *et al.*
Our Ref: 2057.0060002/JAG/BJD

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Second Supplemental Information Disclosure Statement;
2. A listing of the cited documents on Form PTO-1449;
3. A copy of the cited document (AS40);
4. Corrected Form PTO-1449, page 1 of 36 and page 3 of 36; and
5. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
December 10, 2004
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

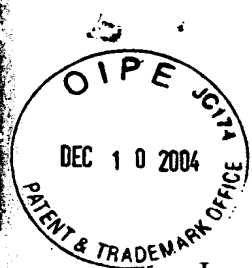
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "B. J. Del Buono", with a large, stylized flourish at the end.

Brian J. Del Buono
Attorney for Applicants
Registration No. 42,473

BJD/SAC/jk
Enclosures

343545



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Bhaskaran *et al.*

Appl. No.: 10/743,295

Filed: December 23, 2003

For: **Polymer Conjugates of Cytokines,
Chemokines, Growth Factors,
Polypeptide Hormones and
Antagonists Thereof with Preserved
Receptor-Binding Activity**

Confirmation No.: 7998

Art Unit: 1641

Examiner: *To be assigned*

Atty. Docket: 2057.0060002/JAG/BJD

Second Supplemental Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450
Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

The numbering on this Second Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' First Supplemental Information Disclosure Statement filed September 28, 2004, in connection with the above-captioned application.

Copies of documents **AA9-AF9** are not provided in accordance with the Changes To Support Implementation of the United States Patent and Trademark Office 21st Century Strategic Plan, effective October 21, 2004, which states "section 1.98(a)(2)(i) is amended to eliminate the requirement in paragraph (a)(2)(i) for a copy of each U.S. patent or U.S. patent application publication listed in an IDS in a patent application regardless of the filing date of the application." A copy of each other document is provided.

Applicants would like to bring to the Examiner's attention that an inadvertent error was made without deceptive intent in the listing of two of the patent numbers in the original Information

Bhaskaran *et al.*
Appl. No. 10/743,295

Disclosure Statement filed on September 28, 2004. Document **AE1** should be U.S. Patent No. 4,462,940, not 4,462,946. Document **AD3** should be U.S. Patent No. 5,446,090, not 5,449,090. Applicants apologize for any inconvenience caused to the Office, and respectfully request that the Corrected Form PTO-1449 pages submitted herewith be substituted for the original Form PTO-1449 pages submitted with the Information Disclosure Statement.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached Form PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

Bhaskaran *et al.*
Appl. No. 10/743,295

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Brian J. Del Buono
Attorney for Applicants
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Date: Dec. 10, 2004
1100 New York Avenue, N.W.
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333544_1.DOC

DEC 10 2004

FORM PTO-1449

SECOND SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
2057.0060002/JAG/BJDAPPLICATION NO.
10/743,295APPLICANT
BHASKARAN et al.FILING DATE
December 23, 2003GROUP
1641

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
|---------------------|-----|-----------------|------------|-----------------|-------|-----------|-------------|
| | AA9 | 4,588,585 | 05/13/1986 | Mark et al. | 424 | 85 | 09/28/1984 |
| | AB9 | 5,460,811 | 10/24/1995 | Goeddel et al. | 424 | 85.6 | 06/12/1989 |
| | AC9 | 6,482,613 B1 | 11/19/2002 | Goeddel et al. | 435 | 69.51 | 01/19/1988 |
| | AD9 | 2002/0172661 A1 | 11/21/2002 | Shirley et al. | 424 | 85.6 | 10/25/2001 |
| | AE9 | 2004/0181035 A1 | 09/16/2004 | Kinstler et al. | 530 | 350 | 03/26/2001 |
| | AF9 | 2004/0191219 A1 | 09/30/2004 | Shirley et al. | 424 | 85.6 | 04/09/2004 |
| | AG | | | | | | |
| | AH | | | | | | |
| | AI | | | | | | |
| | AJ | | | | | | |
| | AK | | | | | | |

FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
|---------------------|-----|-----------------|------|---------|-------|-----------|-------------|
| | AL | | | | | | Yes No |
| | AM5 | | | | | | Yes No |
| | AN5 | | | | | | Yes No |
| | AO | | | | | | Yes No |
| | AP | | | | | | Yes No |

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

| | | | |
|--|----|-----------|--|
| | AR | | |
| | AS | <u>40</u> | Unverified partial translation of Doc. No. AP4 (WO 04/046222 A1), pages 12-13 (Tables 1 and 2); and 79-92 (Example 35, and claims 1-29). |
| | AT | <u>40</u> | |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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| CORRECTED FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u> | ATTY. DOCKET NO. 2057.0060002/JAG/BJD | APPLICATION NO. 10/743,295 |
| | APPLICANT BHASKARAN et al. | |
| | FILING DATE December 23, 2003 | GROUP 1641 |

| U.S. PATENT DOCUMENTS | | | | | | | |
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| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA3 | 5,362,852 | 11/08/1994 | Geoghegan et al. | | | 09/27/1991 |
| | AB3 | 5,382,657 | 01/17/1995 | Karasiewicz et al. | | | 08/26/1992 |
| | AC3 | 5,395,619 | 03/07/1995 | Zalipsky et al. | | | 03/03/1993 |
| | AD3 | 5,446,090 | 08/29/1995 | Harris | | | 11/12/1993 |
| | AE3 | 5,468,478 | 11/21/1995 | Saifer et al. | | | 10/18/1993 |
| | AF3 | 5,476,653 | 12/19/1995 | Pitt et al. | | | 03/22/1995 |
| | AG3 | 5,539,063 | 07/23/1996 | Hakimi et al. | | | 06/01/1995 |
| | AH3 | 5,605,976 | 02/25/1997 | Martinez et al. | | | 05/15/1995 |
| | AI3 | 5,612,460 | 03/18/1997 | Zalipsky | | | 02/17/1994 |
| | AJ3 | 5,643,575 | 07/01/1997 | Martinez et al. | | | 10/27/1993 |
| | AK3 | 5,672,662 | 09/30/1997 | Harris et al. | | | 10/02/1995 |

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| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL3 | WO 99/55377 A2 | 11/04/1999 | WIPO | | | Yes No |
| | AM3 | WO 99/58142 A1 | 11/18/1999 | WIPO | | | Yes No |
| | AN3 | WO 00/07629 A2 and A3 | 02/17/2000 | WIPO | | | Yes No |
| | AO3 | WO 00/23114 A2 and A3 | 04/27/2000 | WIPO | | | Yes No |
| | AP3 | WO 01/02017 A2 and A3 | 01/11/2001 | WIPO | | | Yes No |

| OTHER (Including Author, Title, Date, Pertinent Pages, etc.) | | | |
|--|----------|---|-----------------|
| AR | <u>3</u> | Bamborough, P., et al., "The interleukin-2 and interleukin-4 receptors studied by molecular modeling," Structure 2:839-851, Elsevier Science Ltd. (1994) | |
| AS | <u>3</u> | Basser, R.L., et al., "Development of pancytopenia with neutralizing antibodies to thrombopoietin after multicycle chemotherapy supported by megakaryocyte growth and development factor," Blood 99:2599-2602, The American Society of Hematology (April 2002) | |
| AT | <u>3</u> | Bertolotto, A., et. al., "Differential effects of three interferon betas on neutralising antibodies in patients with multiple sclerosis: a follow up study in an independent laboratory," J. Neurol. Neurosurg. Psychiatry. 73:148-153, BMJ Publishing Group (April 2002) | |
| EXAMINER | | | DATE CONSIDERED |

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|---|--|-------------------------------|
| CORRECTED FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT | ATTY. DOCKET NO. 2057.0060002/JAG/BJD | APPLICATION NO. 10/743,295 |
| | APPLICANT BHASKARAN et al. | |
| | FILING DATE December 23, 2003 | GROUP 1641 |

| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|-----|-----------------|-------------|-------------------|-------|-----------|-------------|
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA1 | 4,002,531 | 01/11/1977 | Royer | | | 01/22/1976 |
| | AB1 | 4,179,337 | 12/18/1979 | Davis et al. | | | 07/28/1977 |
| | AC1 | 4,261,973 | 04/14/1981 | Lee et al. | | | 08/08/1977 |
| | AD1 | 4,301,144 | 11/17/1981 | Iwashita et al. | | | 07/10/1980 |
| | AE1 | 4,462,940 | 07/31/1984 | Hanisch et al. | | | 05/18/1983 |
| | AF1 | 4,609,546 | 09/02/1986 | Hiratani | | | 06/23/1983 |
| | AG1 | 4,732,863 | 003/22/1988 | Tomasi et al. | | | 12/31/1984 |
| | AH1 | 4,816,440 | 03/28/1989 | Thomson | | | 09/26/1985 |
| | AI1 | 4,894,330 | 01/16/1990 | Hershenson et al. | | | 12/23/1986 |
| | AJ1 | 4,902,502 | 02/20/1990 | Nitecki et al. | | | 01/23/1989 |
| | AK1 | 4,904,584 | 02/27/1990 | Shaw | | | 12/23/1987 |

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|-----|---------------------------|------------|---------|-------|-----------|-------------|
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL1 | EP 0 098 110 B1 | 10/18/1989 | Europe | | | Yes No |
| | AM1 | EP 0 733 067 B1 | 05/12/1999 | Europe | | | Yes No |
| | AN1 | EP 1 039 922 B1 | 06/12/2002 | Europe | | | Yes No |
| | AO1 | EP 0 822 199 A2 and A3 | 02/04/1998 | Europe | | | Yes No |
| | AP1 | WO 89/01033 A1 | 02/09/1989 | WIPO | | | Yes No |

| OTHER (Including Author, Title, Date, Pertinent Pages, etc.) | | | |
|--|----------|--|-----------------|
| AR | <u>1</u> | Abuchowski, A., et al., "Immunosuppressive properties and circulating life of <i>Achromobacter</i> glutaminase-asparaginase covalently attached to polyethylene glycol in man," <i>Cancer Treat Rep</i> 65:1077-1081, Kluwer Academic (1981) | |
| AS | <u>1</u> | Abuchowski, A., et al., "Cancer therapy with chemically modified enzymes. I. Antitumor properties of polyethylene glycol-asparaginase conjugates," <i>Cancer Biochem Biophys</i> 7:175-186, Gordon & Breach (1984) | |
| AT | <u>1</u> | Abuchowski, A., et al., "Effect of covalent attachment of polyethylene glycol on immunogenicity and circulating life of bovine liver catalase," <i>J Biol Chem</i> 252:3582-3586, The American Society for Biochemistry and Molecular Biology (1977) | |
| EXAMINER | | | DATE CONSIDERED |

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